

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/250,466	02/16/1999	ILSE CHUDOBA	RPE-27	2088	
7:	590 06/03/2005		EXAMINER		
JOHN B HARDAWAY III			MORAN, MARJORIE A		
HARDAWAY P O BOX 1010			ART UNIT	PAPER NUMBER	
FEDERAL STATION			1631		
GREENVILLE	, SC 296030107	DATE MAILED: 06/03/2005			

Please find below and/or attached an Office communication concerning this application or proceeding.

		'	Application No.	/	Applicant(s)			
			09/250,466	(	CHUDOBA ET AL.			
O	ffice Action Summary		Examiner	1	Art Unit			
			Marjorie A. Moran		1631			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply								
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).								
Status						•		
1)⊠ Resp	onsive to communication(s) file	ed on <u>14 Oct</u>	<u>ober 2004</u> .					
2a)☐ This	This action is <b>FINAL</b> . 2b) This action is non-final.							
•	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims								
<ul> <li>4) ☐ Claim(s) 56-107 is/are pending in the application.</li> <li>4a) Of the above claim(s) is/are withdrawn from consideration.</li> <li>5) ☐ Claim(s) 56-58,60-84 and 86-107 is/are allowed.</li> <li>6) ☐ Claim(s) 59 and 85 is/are rejected.</li> <li>7) ☐ Claim(s) is/are objected to.</li> <li>8) ☐ Claim(s) are subject to restriction and/or election requirement.</li> </ul>								
Application Pa	pers							
9)☐ The s <sub>i</sub>	pecification is objected to by the	e Examiner.	•					
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.								
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
Priority under	35 U.S.C. § 119							
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>								
Attachment(s)						J		
2) Notice of Dra 3) Information [	ferences Cited (PTO-892)  Iftsperson's Patent Drawing Review (P  Disclosure Statement(s) (PTO-1449 or  Mail Date		4) Interview Su Paper No(s) 5) Notice of Inf 6) Other:	)/Mail Date formal Pate		D-152)		

Application/Control Number: 09/250,466

Art Unit: 1631

#### Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/14/04 has been entered.

Claims 56-107 are pending. All rejections and objections not reiterated below are hereby withdrawn.

### Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 59 and 85 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. This is a NEW MATTER rejection.

Concentration values of bonded labeled detector molecules which have a positive inclination followed by a negative inclination along the longitudinal direction of a polymer are new matter. The original claims did not recite any "inclination" limitations. The originally filed specification, on page 5, line 21 to page 6, line 2, provides support for binding of detector molecules wherein the molecules are bound in a continuously changing concentration, specifically in a Gaussian distribution, thereby providing support for limitations in new claims 57-

Art Unit: 1631

58, 60, 83-84 and 86. The working example of pages 9-11 provides support for the steps recited in new claims 56 and 82. Page 10 further discloses that the method may result in constantly changing ratios of fluorescent intensities along a polymer's length. The originally filed specification does not provide support anywhere for concentrations values of labeled molecules which have a positive inclination followed by a negative inclination, as recited in new claims 59 and 85. In the response filed 10/14/04, applicant does not point to support, by page and line number or specific Figure element, for the newly recited limitations, and none is apparent, as set forth above. For these reasons, the claims are rejected for reciting new matter.

## Allowable Subject Matter

The following is an examiner's statement of reasons for allowance: the prior art does not teach or fairly suggest a method of identifying differences between biopolymers wherein both intensity and intensity ratios of labeled detector molecules are recorded and evaluated, and wherein a false color is assigned to various sections of a scanned biopolymer based on the relative intensity ratios, and wherein the bonded labeled detector molecules of at least one set of such molecules displays a continuously changing label-signal intensity along the longitudinal direction of the biopolymer.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

#### Conclusion

Claims 56-58, 60-84, and 86-107 are allowed; claims 59 and 85 are rejected.

Application/Control Number: 09/250,466 Page 4

Art Unit: 1631

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marjorie A. Moran whose telephone number is (571) 272-0720. The examiner can normally be reached on Mon,Wed: 7-1:30; Tue,Thur: 7:30-6; Fri 7-3:30 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ardin Marschel can be reached on (571)272-0718. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Marjorie A. Moran Primary Examiner Art Unit 1631

Mayour a-Novan